

Quality Assurance/Science Activity Centre Germany as part of WMO/GAW: Overview on Structure and Responsibilities

K. Mannschreck¹, W. Rudolf², G. Enders¹, B. Rappenglück³, H.E. Scheel³, A. Wiedensohler⁴

¹UFS Schneefernerhaus, Zugspitze 5, 82475 Garmisch-Partenkirchen, Germany;
+49 8805 954 151, Fax: +49 (0) 8805 954 230, E-mail: k.mannschreck@schneefernerhaus.de

²Umweltbundesamt, 63225 Langen, Germany

³Forschungszentrum Karlsruhe, IMK-IFU, 82467 Garmisch-Partenkirchen, Germany

⁴Leibniz-Institut für Troposphärenforschung, 04318 Leipzig, Germany

The Global Atmosphere Watch (GAW) program of the World Meteorological Organization (WMO) is a coordinated network of observing stations and related facilities. A system for quality assurance and control (Figure 1) was established by GAW to ensure that the data are consistent and meet the required data-quality objectives. The core of the quality-assurance system consists of Quality Assurance/Science Activity Centres (QA/SAC). Each of the four QA/SACs has global responsibility for specific atmospheric parameters and plays a major role in calibration intercomparisons, training, quality control, and establishing measurement protocols.

QA/SAC Germany was established in 2000 and is operated by the German Environmental Agency (UBA). It is responsible for the data quality of volatile organic compounds (VOC), nitrous oxide (N₂O), and physical aerosol properties. For each of these parameters World Calibration Centres (WCC) have been established, which maintain, if available, global calibration standards (in close cooperation with the respective central calibration laboratories), perform system and performance audits at the stations, organize intercomparisons, and provide training. Starting in 2001, two courses per year have been carried out, each with 10-12 participants from GAW stations worldwide or partner networks. Capacity building and training plays an essential role within GAW and is an integral part of the quality-assurance system. Within QA/SAC Germany these activities are coordinated, organized, and performed by the German Training and Education Centre (GAWTEC) located at the high-altitude station UFS Schneefernerhaus in the Alps (www.schneefernerhaus.de). QA/SAC Germany has a strong interest in coordinating its programs with existing activities of the GAW partner networks. Current and intended cooperations are also outlined.

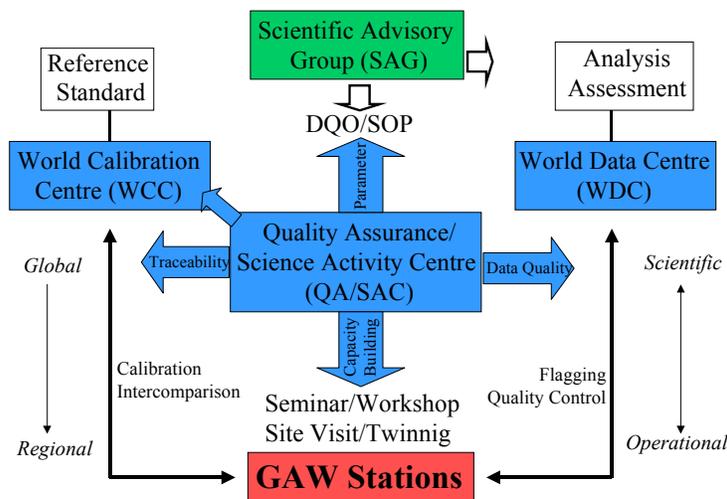


Figure 1: Schematic of quality assurance and control within the WMO Global Atmosphere Watch network (adopted from V.A. Mohonen et al., *QA/SAC Germany, Final Report*, 2001).